



Advanced Science & Technology Managers' Course STM302

Homework Requirement 1 - Personal Technology Transition Issues

Both requirements are to be completed in advance. See pages 3-5 for the 2nd requirement.

Assignment: Each attendee is to describe, **in one page or less**, an issue which you are now facing, or have faced in the past which loomed as an impediment to your ability to transition your technology to an acquisition program of record. Your paper format is acceptable, as well as most e-formats are supported: Microsoft Word, WordPerfect, Adobe Acrobat, etc.

Discuss your options and actions taken to overcome this impediment. Also indicate areas where more knowledge would help overcome the impediment.

If you don't have personal experience in this area, please talk to a colleague and relate the colleague's experience. Do not discuss any classified or sensitive information. This is to be a management perspective of a transition issue.

Send in this assignment one week before class as indicated below. We will group the issues for discussion in class. Individuals of papers most relevant to the course objectives may be asked to give a 10-minute presentation on the 3rd day.

Due: Please email your issue paper so as to arrive no later than the Monday of the week prior to the start of class:

<u>Class</u>	<u>Starts on</u>	<u>Due By COB of</u>	<u>Email to</u>
05-002	18 October 04	12 October 04	<u>randy.zittel@dau.mil</u>
05-001	6 December 04	29 November 04	<u>randy.zittel@dau.mil</u>

OPTIONAL Presentation Materials: If you have additional information in a briefing package, a **short** video (less than 5 minutes) or other media, which may help the class understand the issue, type of system, etc., please bring it along, or email it to us. This is NOT a formal requirement, but most offices have an overview briefing or short video which demonstrates the concept or issue. The class is usually a diverse group with representatives from all 4 services, DoD agencies, industry participants and other federal employees (Coast Guard, NOAA, FAA, NSA, GAO, etc.).

Media formats:

- a. The classroom is equipped with a full range of computer equipment and electronic projection. Microsoft Office 2000, Adobe Acrobat, QuickTime, Media player and other formats are supported.
- b. In-class computers support 100Mb zip disks, 3.5-inch diskettes, USB memory sticks, CD-ROM and DVD.
- c. Classroom computers also have high-speed internet access and email receipt, so e-files can also be sent directly to the classroom.

Please do NOT email your Requirement 2 exercise material. Bring that to class in two (2) copies on the first day.

Questions or additional information, please contact:

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Requirement 2 - Acquisition Review

Name: _____

References: Introduction to Defense Acquisition Management, Nov 2003, DAU Press, and DoD Instruction 5000.2, "Operation of the Defense Acquisition System", 12 May 03. They are both available at http://northeast.dau.mil/course_info.asp. Scroll down to the link located just under the course catalogue number.

Please answer all questions, and **bring two paper copies to class on the first day.** One copy will be turned in at the beginning of the course, and the other copy will be retained by you for use in the group discussion.

DoD Directive 5000.1 and DoD Instruction 5000.2, 12 May 03, are the primary policies for the DoD acquisition model. The former DoD 5000.2 Regulation was converted to "The Defense Acquisition Guidebook" of best practices as an optional reference. The Joint Chiefs of Staff also issued new guidance replacing the previous *Requirements Generation System*, with *The Joint Capabilities Integration and Development System* (JCIDS). JCIDS is mandated in CJSC Instruction 3170.01D, 12 March 04. The current policies will be part of the in-class discussion. Attendees are expected to use DoDI 5000.2 and the Introduction to Defense Acquisition Management (IDAM) for this exercise. The 5000 series and IDAM are available from the STM302 website identified in the initial course email. Additionally, the DoD 5000 Resource Center (<http://dod5000.dau.mil>) contains the 5000 and JCS 3170 series documents with online tutorials. The IDAM, is a summary of the complete acquisition, JCIDS and Planning, Programming, Budgeting and Execution (PPBE) System.

Answers can be on this document, or a separate sheet.

Succinct handwritten answers are suggested. ***"Be smart, be brief, be done!"***

1. The DoD acquisition process is composed of 3 milestones, A, B and C, and 5 phases, Concept Refinement, Technology Development, Systems Development and Demonstration, Production and Deployment and Operations & Support. Each program tailors this template to the unique requirements, technology maturity and needs of the customer. Who determines and validates the requirements for a major Acquisition Category program, i.e. ACAT 1 or 1A?

2. An acquisition program is based on an approved requirement documented in a Capability Development document (formerly known as an Operational Requirements Document {ORD}). What document precedes a CDD?
3. As part of the initial needs analysis, what does the requirer and customer do before deciding on a material solution as the only way to meet the threat or deficiency? How is that documented?
4. In addition to the acquisition system and the CJSC Joint Capabilities Integration and Development System (formerly known as the Requirements Generation System), the 3rd decision support system which, collectively with the other two, establishes and develops new military systems in the DoD, is the Programming, Planning and Budgeting Execution Systems (PPBE). PPBE is formerly known as the Programming, Planning and Budgeting Systems (PPBS). What two federal activities outside of DoD are significantly involved with DoD in the PPBE?
5. What phase precedes the Technology Development Phase and Milestone A? What activities are expected to occur during this time?
6. Technology Development (TD) Phase begins after approval of the new system concept by the appropriate acquisition executive at Milestone A. What is the primary purpose of the phase and what type of activities traditionally go on?

7. The Systems Development and Demonstration (SDD) phase begins after Milestone B when an approved CDD, funding and mature technology is available. The Chairman of the Joint Chiefs of Staff (CJCS) requires an updated Integrated Architecture for a system to enter SDD. What architectural views make up an integrated architecture, and what do they represent?
8. What is the primary purpose of Milestone C and what phase does it authorize?
9. During the Production and Deployment Phase, when is a system ready to go into full-rate production and at what point is that decided?
10. Acquisition is the integration of new technologies into a system to meet an identified threat or operational deficiency. Based on the previous questions, at what point can **new** technology **generally** be inserted into a system acquisition and how mature should it be?

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